FLIGHT SUMMARY REPORT

Flight Number: 98-003-01

Calendar/Julian Date: 10 March 1998 • 069

Sensor Package: Dual Wild Heerbrugg RC-30

DoE Multispectral Scanner (MSS)

Area(s) Covered: East Bay Foothills, CA

Investigator(s): Pike, USGS Aircraft #: 799

Department of Energy

Cessna Citation

SENSOR DATA

Accession #: 05246 05247

Sensor ID #: 017

Sensor Type: RC-30 RC-30

Focal Length: 6" 3"

152.75 mm 88.58 mm

Film Type: Aerocolor Negative Aerocolor Negative

EK-2445 EK-2445

Filtration: AV 2.2 AV 2.2

Spectral Band: 420-700 nm 420-700 nm

f Stop: 4

Shutter Speed: Variable Variable

of Frames: 27

% Overlap: 60 80

Quality: Excellent Excellent

Remarks:

Airborne Science and Applications Program

The Airborne Science Branch at NASA's Dryden Flight Research Center, Edwards, California, operates two ER-2 high altitude aircraft in support of NASA earth science research. The ER-2s are used as readily deployable high altitude sensor platforms to collect remote sensing and in situ data on earth resources, celestial phenomena, atmospheric dynamics, and oceanic processes. Additionally, these aircraft are used for electronic sensor research and development and satellite investigative support.

The ER-2s are flown from various deployment sites in support of scientific research sponsored by NASA and other federal, state, university, and industry investigators. Data are collected from deployment sites in Kansas, Texas, Virginia, Florida, and Alaska. Cooperative international scientific projects have deployed the aircraft to sites in Great Britain, Australia, Chile, and Norway.

Photographic and digital imaging sensors are flown aboard the ER-2s in support of research objectives defined by the sponsoring investigators. High resolution mapping cameras and digital multispectral imaging sensors are utilized in a variety of configurations in the ER-2s' four pressurized experiment compartments. The following provides a description of the digital multispectral sensor(s) and camera(s) used for data collection during this flight.

Camera Systems

Various camera systems and films are used for photographic data collection. Film types include high definition color infrared, natural color, and black and white emulsions. Available photographic systems are as follows:

- Wild-Heerbrugg RC-10 metric mapping camera
 - 9 x 9 inch film format
 - 6 inch focal length lens provides area coverage of 16 x 16 nautical miles from 65,000 feet
 - 12 inch focal length lens provides area coverage of 8 x 8 nautical miles from 65,000 feet
- Hycon HR-732 large scale mapping camera
 - 9 x 18 inch film format
 - 24 inch focal length lens provides area coverage of 4 x 8 nautical miles from 65.000 feet
- IRIS II Panoramic camera
 - 4.5 x 34.7 inch film format
 - 24 inch focal length lens
 - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

The U.S. Geological Survey's EROS Data Center at Sioux Falls, South Dakota serves as the archive and product distribution facility for NASA-Ames aircraft acquired photographic and digital imagery. For information regarding photography and digital data (including areas of coverage, products, and product costs) contact EROS Data Center, Customer Services, Sioux Falls, South Dakota 57198 (Telephone: 605-594-6151).

Information regarding ER-2 acquired photographic and digital data is available through the Aircraft Data Facility at Ames Research Center. For specific information regarding flight documentation, sensor parameters, and areas of coverage contact the Aircraft Data Facility, NASA-Ames Research Center, Mail Stop 240-6, Moffett Field, California 94035-1000 (Telephone: 650-604-6252).

CAMERA FLIGHT LINE DATA FLIGHT NO. 98-003-01

Accession # 05246

Sensor # 017

Check	Frame	Time (GMT-hr, min, sec)		Altitude, MSL	
Points	Numbers	START	END	feet/meters	Cloud Cover/Remarks
	0086-0089	21:37:21	21:38:31	16500/5030	Oblique frames, San Pablo Bay, Pt. Reyes
A - B	0090-0112	21:39:05	21:45:34	16500/5030	Clear



